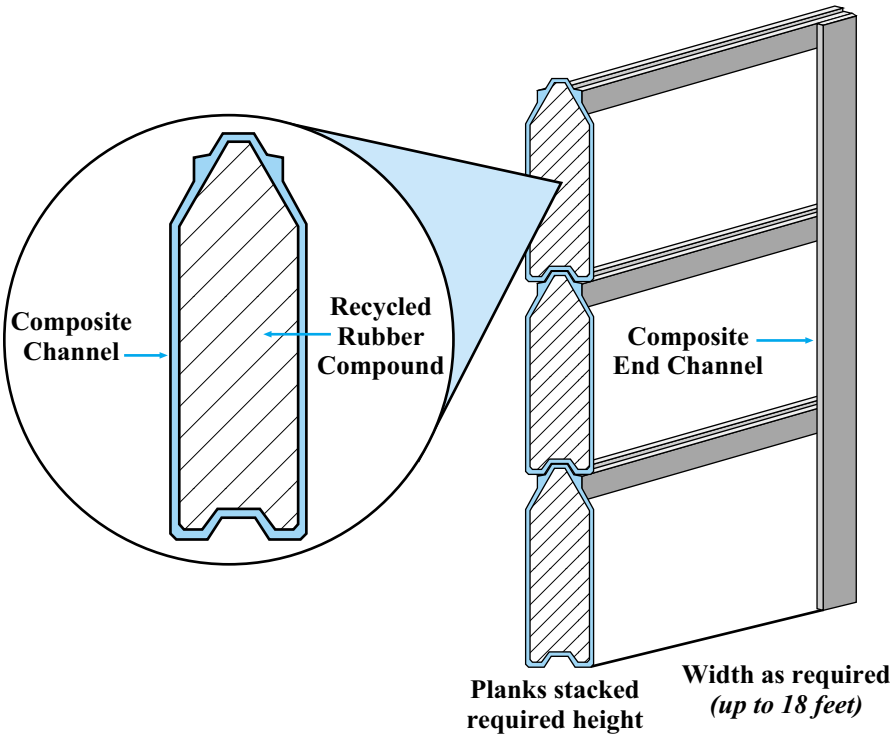
Carsonite Noise Barrier Wall

Noise Barrier Offers Environmental Solutions and Delivers Superior Sound Reduction

Noise from highways and mass transit systems is a frequent complaint of neighboring residents and is often a concern of regional governments. Traditional sound barriers technology is often expensive to install, and made from concrete or wood materials, limiting traditional noise barriers as a solution to noise pollution.

With assistance from the Department of Energy's Inventions and Innovation Program, Carsonite International developed a system to provide sound barriers that use waste tire rubber to block noise. The technology uses a recycled rubber compound as the center in a composite channel design. The unique design of the sound barrier allows the sections to be stacked to the necessary height. Because the sections are lightweight (7.5 lbs per square foot), installing the noise barrier is inexpensive and straightforward. The technology is durable and outperforms traditional noise barrier materials.

Research by the U.S. Environmental Protection Agency estimates that one tire per person is generated as scrap each year. The Carsonite sound barriers use approximately 20,800 tires per mile of barrier. Using scrap tires in the sound barrier is more energy efficient than using the tires for combustion fuel or placing them in landfills. This sound barrier technology effectively reduces both noise and waste pollution in an innovative way.



Carsonite Noise Barrier System

Overview

- Invented by the Carsonite International Company
- Commercialized in 1994
- Installations in 14 states

Applications

Noise reduction along highways, mass transit lines, crowded residential roads, and other high traffic areas

Capabilities

- Measures a Sound Transmission Class of 36.
- Exceeds guidelines for noise reduction coefficient and wind loads set by State Departments of Transportation and the American Association of State Highway and Transportation Officials.
- Withstands harsh weather conditions.
- Avoids the need for heavy equipment for installation.
- Can be installed on existing structures without additional reinforcement.

Benefits

Noise Reduction

Provides sound wall performance more effective than concrete, metal, or wood walls while using unwanted tire waste in a beneficial way.

Profitability and Productivity

Lightweight design reduces the installation cost while the durable materials increase the system's performance.

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